

Amendments to the Claims

In the Claims:

1. (Currently Amended) A device for transmitting optical signals, said device comprising:

an optical input accepting said optical signals;

a control device directing said optical signals between said at least one optical input and an optical output, the control device including at least one mirror element having a cantilever; and

a channel located between said optical input and said optical output confining said optical signals to a pre-determined path.

2. (Currently Amended) The device of claim 1 wherein said ~~control device comprises~~ at least one mirror element is configured to reflect said optical signals within said device.

3. (Currently Amended) The device of claim 2 wherein ~~each of said at least one mirror elements comprises a cantilever having~~ has a magnetically sensitive portion and a reflective portion.

4. (Currently Amended) The device of claim 3 1 wherein said cantilever is configured to be switched between a first state and a second state by one of a plurality of electromagnetic signals.

5. (Original) The device of claim 4 wherein each of said electromagnetic signals are configured to induce a torque in one of said cantilevers corresponding to one of said plurality of mirror elements, such that said cantilever is switched between said first state and said second state.

6. (Original) The device of claim 5 wherein said plurality of electromagnetic signals comprise magnetic signals generated by a plurality of conductors.

7. (Original) The device of claim 5 wherein said plurality of electromagnetic signals comprise electrostatic signals generated by a plurality of electrodes.

8. (Original) The device of claim 1 wherein said channel comprises at least one reflective wall.

9. (Previously Presented) The device of claim 8 wherein said reflective wall comprises one of the group consisting of aluminum, gold, silver and chromium.

10. (Original) The device of claim 5 wherein said channel comprises at least one reflective wall.

11. (Previously Presented) The device of claim 10 wherein said reflective wall comprises one of the group consisting of aluminum, gold, silver and chromium.

12. (Original) The device of claim 8 wherein said channel comprises at least one channel mirror configured to receive said optical signal and to direct said optical signal through said channel.

13. (Original) The device of claim 10 wherein said channel comprises at least one channel mirror in optical communication with one of said mirror elements, wherein said channel mirror is configured to receive said optical signal and to direct said optical signal through said channel.

14. (Previously Presented) A method comprising:
forming a reflective portion on a switching element comprising a cantilever;
conducting an optical signal through channels that confine said optical signal to predetermined paths; and

switching said cantilever such that said reflective portion is placed in the path of said optical signal when said optical signal is desired at a first output on a first one of the predetermined paths, and such that said reflective portion is placed out of the path of said optical signal when said optical signal is desired at a second output on a second one of said predetermined paths.

15. (Previously Presented) The method of claim 14 wherein said channels comprise a reflective wall.

16. (Original) The method of claim 15 wherein said conducting step comprises directing said optical signal away from said reflective wall with a channel mirror.

17. (Original) The method of claim 15 wherein said cantilever is configured to be switched by one of a plurality of electromagnetic signals.

18. (Original) The method of claim 17 wherein said electromagnetic signals produce a magnetic torque in said cantilever.

19. (Original) A switch configured to execute the method of claim 15.

20. (Original) A switch configured to execute the method of claim 18.